

Science Toolkit: Grade 7 Objective 3.E.1.f

Student Handout: Science: Grade 7 Objective 3.E.1.f

Standard 3.0 Life Science

Topic E. Flow of Matter and Energy

Indicator 1. Explain that the transfer and transformation of matter and energy links organisms to one another and to their physical setting.

Objective f. Provide evidence that supports the premise "In the flow of matter system the total amount of matter remains constant even though its form and location change."

Carbon cycle

Nitrogen cycle

Food chains and food webs

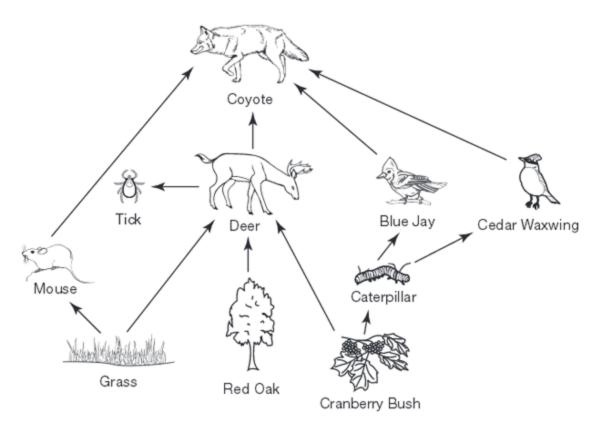
Selected Response (SR) Item

Question

Use the information and the diagram below to answer the following:

Partial Forest Food Web

The movement of energy and matter through some organisms in a forest ecosystem is shown in this food web.



Which food chain <u>best</u> shows the flow of matter in organisms in the food web?

- A. $tick \rightarrow mouse \rightarrow red oak$
- B. grass \rightarrow deer \rightarrow blue jay
- C. cranberry bush \rightarrow deer \rightarrow coyote
- D. blue jay \rightarrow caterpillar \rightarrow cedar waxwing

Correct Answer

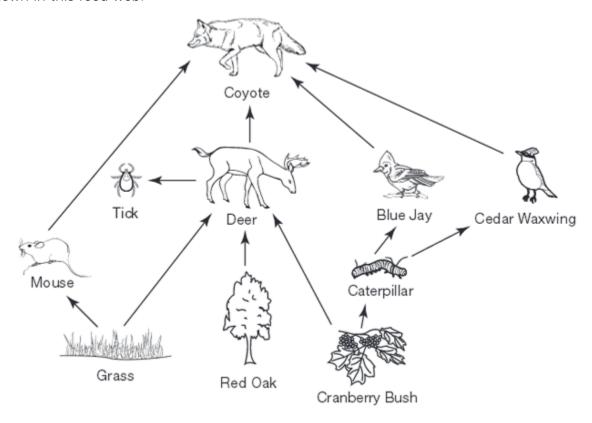
C. cranberry bush \rightarrow deer \rightarrow coyote

Question

Use the information and the diagram below to answer the following:

Partial Forest Food Web

The movement of energy and matter through some organisms in a forest ecosystem is shown in this food web.



Which food chain best shows the flow of matter in organisms in the food web?

- A. $tick \rightarrow mouse \rightarrow red oak$
- B. grass \rightarrow deer \rightarrow blue jay
- C. cranberry bush \rightarrow deer \rightarrow coyote
- D. blue jay \rightarrow caterpillar \rightarrow cedar waxwing